

## DECISION RECORD

Reference: Environmental Assessment (EA) for Grazing Authorization, NM-060-00-186

Decision: It is my decision to authorize the issuance of a ten year grazing permit on the South Wiggins allotment #65081. The permit will authorize 13 AU's (156 AUM's active at 100% public land) from March 1 to the end of February each year. Twenty-two Animal Unit Months will remain in non-use. Any additional mitigation measures identified in the environmental assessment impacts sections of the referenced EA have been formulated into stipulations, terms and conditions. Comments made to this proposed action and alternative were considered and any necessary changes would have been incorporated into this Decision Record.

The fundamentals of rangeland health are set forth in 43 CFR 4180.1 and pertain to watershed functions, ecological processes, water quality and habitat for threatened and endangered species and other special status species. Based on the available data and professional judgement, the evaluation by this environmental assessment indicates that the conditions identified in the fundamentals of rangeland health exist on the allotment.

If you wish to protest this proposed decision in accordance with 43 CFR 4160.2, you are allowed 15 days to do so in person or in writing to the authorized officer, after the receipt of this decision. Please be specific in your points of protest. In the absence of a protest, this proposed decision will become the final decision of the authorized officer without further notice, in accordance with 43 CFR 4160.3. A period of 30 days following receipt of the final decision, or 30 days after the date the proposed decision becomes final, is provided for filing an appeal and petition for the stay of the decision, for the purposes of a hearing before an Administrative Law Judge (43 CFR 4.470.).

The appeal shall be filed with the office of the Field Office Manager, 2909 West Second, Roswell, NM, 88201, and must state clearly and concisely your specific points.

Signed by T. R. Kreager  
Assistant Field Manager

4/25/01  
Date



ENVIRONMENTAL ASSESSMENT  
for  
GRAZING AUTHORIZATION

ALLOTMENT 65081, Section 03

EA-NM-060-00-186

September, 2000

U.S. Department of the Interior  
Bureau of Land Management  
Roswell Field Office  
Roswell, New Mexico

## **Environmental Assessment for Grazing Allotments 65081**

### **1. Background**

#### **A. Introduction**

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing permit on Allotment 6508 1.

The scope of this environmental assessment is limited to the effects of issuing new grazing permits on allotment 6508 1. Over time, the need could arise for subsequent management activities which relate to grazing authorization. These activities could include vegetation treatments (e.g., prescribed fires, herbicide projects), range improvement projects (e.g., fences, water developments), and others. Future management actions related to livestock grazing would be addressed in project- specific NEPA documents as they are proposed.

#### **B. Purpose and Need for the Proposed Action**

The purpose of issuing these grazing permits and leases would be to authorize livestock grazing on the public range for the above mentioned Allotments. The lease would be needed to specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR 4130.3, 4130.3-1, and 4130.3-2.

#### **C. Conformance with Land Use Planning**

Upon review of the Roswell Resource Management Plan/Environmental Impact Statement (Bureau of Land Management 1997), the proposed action was found to conform with the Record of Decision as required by 43 CFR 1610.5-5.

#### **D. Relationships to Statutes, Regulations, or Other Plans**

The proposed action and alternatives are consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (16 U.S.C. 1535 et seq.) as amended; the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management; and Executive Order 11990, Protection of Wetlands.

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## **II. Proposed Action and Alternatives**

### **A. Proposed Action:**

Authorize a grazing permit on the South Wiggins allotment #65081 for 13 AUs active use(156 AUMs at 100% public land) and 22 Animnal Unit Months remaining in suspension. Specifically, to authorize a grazing permit for 13 cows from March I to the last day of February of each year, while continuing current livestock management practices.

### **B. No Permit/Lease authorization alternative:**

This alternative, if selected, would be to not issue a new grazing permit for the South Wiggins allotment #6508 1. No grazing would be authorized on federal land under this alternative. The No Grazing alternative was considered, but not chosen in the Rangeland Reform Environmental Impact Statement (EIS) Record of Decision (ROD) (p. 28). The elimination of grazing in the Roswell Field Office Area was considered but eliminated by the Roswell RMP/ROD (pp. ROD-2).

## **III. Affected Environment**

### **General Setting**

Allotment #65081 is located in Chaves County, about 5 miles east of Hagerman, New Mexico. The allotment is made up of two pastures ranging from approximately two to three sections in size. This allotment consists of 987 acres of Federal land, 520 acres of State Land, 1,969 acres of private land and 578 acres of uncontrolled. Currently this allotment is categorized as a "C" or Custodial Management allotment. This allotment is a Section three allotment at 100% public land.

Most of the pastures on this allotment are relatively flat, with shinnery oak, mesquite, three-awns, fluffgrass, black grama and bush muhly grasses.

The primary features in the shinnery oak dune community are topography influenced by aeolian and alluvial sedimentation on upland plains forming hummocks, dunes, sand ridges and swales and the presence of shinnery oak.

This is a unique community type found primarily below the Llano Estacado or Staked Plains, in an area known as Mescalero Sands. It lies in the Canadian Plains and Southern Desert ecosystem between the elevations of 4,100 feet and 4,300 feet. The topography is gently sloping and undulating sandy plains, with moderate to very steep hummocky dunes of up to ten feet and more in height scattered throughout the area. Some of the dunes are stabilized with vegetation, while a number of them are unstable and shifting. Dune blowouts with shinnery oak and bluestem, either isolated or in dune complexes are common in this community. Annual precipitation for this region averages 12 -13 inches.

The following resources or values are not present or would not be affected by the authorization of livestock grazing on Allotment #6508 1; Prime/Unique Farmland, Cultural Resources, Native American Religious Concerns, Wild and Scenic Rivers, Hazardous Wastes, water quality, floodplains, Areas of Critical Environmental Concern, and Minority/low Income populations.

Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities except where criteria to exempt surveys are met. Eligible and potential eligible sites would continue to be protected from damage or archaeologically treated to mitigate damage.

The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

#### **A. Affected Resources**

1. Soils: There are three primary soil units on this allotment; the Berino-Cacique association, the Hollaman Gypsum land complex, and the Roswell-Jalmar association.

##### **Berino-Cacique association**

Soils are 50% Berino fine sandy loam, 30% Cacique loamy fine sand, and 20% less extensive soils. For the Berino soil runoff is very slow. The hazard of water erosion is slight, and the hazard of soil blowing is moderate. For the Cacique soil runoff is slow. The hazard of water erosion is slight. The hazard of soil blowing is severe; however, a moderate hazard of soil blowing is common.

##### **Hollaman-Gypsum land complex**

The soils are well drained very shallow and very shallow over caliche. Permeability is moderate, available water capacity is 1.5 to 2.5 inches. Effective rooting depth is less than 20 inches.

##### **Roswell-Jalmar association.**

Soils are 60% Roswell fine sand, 25% Jalmar fine sand and 15% less extensive soils. These soils are deep, excessively drained. Permeability of the soil is rapid, available water capacity is 3 to 4 inches, runoff is

very slow. water erosion is slight and soil blowing hazard is severe.

## 2. Vegetation:

Three ecological (range) sites exist on the public lands on this allotment. They are the Deep Sand SD-3, Gravelly SD-3 and Shallow sandy SD-3. The Deep Sand SD-3 community is a unique ecological area dominated by tall and mid-grasses. In many areas, the shinnery oak community has shifted from a dominant sand bluestem/little bluestem/hairy grama grassland with varying amounts of shinnery oak, sand sage and yucca to a community dominated by sand dropseed, red and purple three-awn and hairy grama, with increasing annual forbs, shinnery oak, mesquite, sand sage and yucca. The SOD community comprises approximately 15 percent of the allotment and is located on the eastern edge. The Gravelly SD-3 site is dominated by grama grasses, with three awns and tridens. Shrubs common to this site include; creosote bush, catclaw mimosa, and yucca. Associated species found are range ratany, snakeweed, mesquite, cholla cactus and burrograss. The Shallow sandy SD-3 range site comprises predominately black grama, with lesser amounts of plains bristlegrass, sand dropseed, bush muhly, threeawn and fall witchgrass. Shrub species include, mesquite, creosote bush, mimosa and javalina bush which invade under continuous grazing.

The RMP/EIS established resource objectives for the Shinnery Oak Dune community. The vegetative cover by percent composition objectives for the SOD community are grasses 50 - 70 %, forbs 10 - 15 %, shrubs & trees 25 - 40 %. The ground cover objectives for this community are: bare ground 5 - 20 %, litter 25 - 70 %, small & large rock 0 - 1 %, grass & forbs 16 - 40 % and shrubs & trees 3 - 17.

Monitoring studies were conducted in 1977 and 1979. Limited monitoring data exists on this allotment due to its categorization (C) and smaller amounts of public land. Periodic field reviews have been completed to verify resource conditions. At this time no problems are evident.

## 3. Wildlife:

The South Wiggins allotment is adjacent to the Caprock Wildlife Habitat Area (WHA). Wildlife habitat and diversity is similar but due to the absence of lesser prairie chickens and the lacking of good potential habitat, this allotment was not included. The area does however support diverse habitat for more than 54 birds species, 33 species of mammals, and 36 species of reptiles and amphibians.

Raptors that are frequently associated with the vegetation types on this allotment are the red-tailed hawk, swainson's hawk, ferruginous hawk, roughlegged hawk, common nighthawk, and the american kestrel.

Game bird species in this areas include the lesser prairie chicken, scaled and bob white quail, and the mourning dove.

Other bird species that are usually observed are the turkey vulture, roadrunner, chihuahuan raven, great-homed owl, burrowing owl, northern flicker, loggerhead shrike, western meadowlark, western kingbird, pyrrhuloxia, homed lark, and other passerine birds.

At least 33 species of mammals occur on or utilize this allotment. The diversity of small mammals provide for an excellent prey base for carnivores such as the coyote, gray fox, bobcat, raccoon, badger, hooded skunk and striped skunk.

Mammals that provide a prey base include the black-tailed jack rabbit, desert cottontail, spotted ground squirrel, pocket mice, deer mouse, kangaroo rats, northern grasshopper mouse, harvest mice, and the white throated woodrat.

Two big game species that occur the allotment are pronghorn antelope and mule deer.

Reptiles and amphibians that inhabit the area are the dune sagebrush lizard, southern prairie lizard, lesser earless lizard, side-blotched lizard, longnose leopard lizard, sixlined racerunner, tree lizard, skinks, western diamond back, western rattlesnake, coachwhip, spadefoot toads, western box turtle, and the yellow mud turtle.

#### 4. Threatened/Endangered Species

Federal threatened, endangered and candidate species as well as state-listed threatened or endangered species potentially occurring within the proposed project area will be analyzed in this document.

There are no known Federal threatened and endangered species or critical habitat within the allotment.

However, there are Federally Proposed, Candidate and State listed species that may potentially occupy or utilize the area. These include the mountain plover, swift fox and the Sand Dune lizard. For a detailed description of the range, habitats, and potential threats to the swift fox refer to the Biological Opinion (AP1 1-38) in the Roswell RMP. There are no known federally threatened or endangered species occurring within the proposed action area.

#### Special Status Species:

##### Mountain Plover (Federally Proposed as Threatened)

The Mountain plover has been petitioned to be listed as a federally threatened species under the Endangered Species Act. Until a determination is made by the USFWS, actions occurring within this species range and habitat must be analyzed and threatened as a listed species.

The mountain plover is associated with shortgrass and shrub-steppe landscapes throughout its breeding and wintering range. Historically, on the breeding range it occurred on nearly denuded prairie dog towns (Knowles et al. 1982, Olson-Edge and Edge 1987) and in areas of major bison concentration. All of the endemic grassland birds evolved within a grassland mosaic of lightly, moderately, and heavily grazed areas, and mountain plovers are considered to be strongly associated with sites of heaviest grazing pressure, to the point of excessive surface disturbance (Knopf and Miller 1994, Knopf 1996b). Short vegetation, bare ground, and a flat topography are now recognized as habitat-defining characteristics at both breeding and wintering locales. Most mountain plovers breed in Colorado and Montana; breeding also occurs in Wyoming, New Mexico, Arizona, Nebraska, Utah, Kansas, Oklahoma and Texas.

Surveys: Information was taken from the Federal Register Notice and the Roswell RMP. Statewide surveys have been conducted as well as area surveys by S. Williams. No known breeding populations or wintering locales have been found. Specific surveys for this action were not conducted since recent area surveys in May and June of 1998 were completed.

##### Sand Dune Lizard

The State Threatened sand dune lizard only occurs in the southeastern corner of New Mexico and the western region of Texas. Within that range its habitat is restricted to active sand dunes and their peripheries (Degenhardt and Jones 1972). Shinnery oak is the dominant plant species that surrounds the top edge of the active sand dune, with a small composition of grasses inside the blowout area.

During 1991 a study was begun to examine the effects of the removal of shinnery oak on lizard habitat. Through five years of research it was demonstrated that there were 70%-94% fewer lizards in treated pastures as compared to non-treated pastures. As a result, the use of herbicides within suitable sand dune lizard habitat (blowouts) will be avoided.

#### 5. Livestock Management:



The allotment is grazed by cattle under a best pasture rest rotation system. The latest grazing permit was for 13 AU's. The allotment is small and does not lend itself to intensive management. Field reviews show that there is no resource degradation occurring at this time.

#### 6. Visual Resources:

The allotment is located in a Class IV Visual Management Area. The Class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

#### 7. Air Quality:

The allotment is in a Class 11 area for the Prevention of Significant Deterioration of air quality as defined in the federal Clean Air Act, which allows a moderate amount of air quality degradation. Air quality is generally good, Winds are typically southeasterly during the summer, and becoming southwesterly in the winter and early spring. Winds average 10 miles per hour in the fall and 16 miles per hour in the spring, with peak velocities reaching 50 miles per hour. These conditions rapidly disperse air pollutants in the region.

#### 8. Recreation:

Recreation opportunities are limited in this grazing allotment because the public has limited legal/physical access to public lands due to terrain and the private lands off of highway 249. The primary recreational activity occurring in this area is hunting. Mule deer, pronghorn antelope, and game birds such as quail and dove are taken during hunting seasons set by the New Mexico Department of Game and Fish.

Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails.

#### Cave and Karst

A complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment. Presently, no known significant caves or karst features have been identified. If at a later date, a significant cave or karst feature is located on public land, that cave or feature may need to be fenced to exclude livestock grazing and Off Highway Vehicle Use. A separate Environmental Assessment would be prepared to construct this enclosure fence.

### **IV. Environmental Impacts**

#### **A. Impacts of the Proposed Action**

##### 1. Soils:

The permitted use as described in the proposed action is not anticipated to have any adverse impact to the current soil conditions. Some soil loss would continue to occur due to the windy conditions that prevail in this region during parts of the year. If vegetative cover remains stable soil loss may be minimized.

Changes in vegetative ground cover is often linked to the amount and timing of precipitation events. This assessment is based on the assumption that the area will receive at least the long term average in precipitation both in timing and amount.

##### 2. Vegetation:

The continuance of the permitted use at the current use levels authorized by the expiring permit is not

anticipated to have any adverse impact to the current vegetative conditions. The vegetation will continue to be grazed and trampled by domestic livestock as well as other herbivores such as antelope, mule deer, rabbits, rodents and insects. Under the proposed action, it is not anticipated that a significant change in the vegetative composition or amount available for use will occur. The continuance of the present livestock management practices is not anticipated to alter the vegetative composition. The pastures will continue to get some rest as outlined in the affected environment. Ecological condition and trend is expected to remain stable and may possibly increase over the long term at this permit number.

### 3. Wildlife:

Under the proposed action, wildlife will continue to compete with domestic livestock for space, forage and browse. With proper livestock management and carrying capacities, there will be adequate cover and forage for wildlife species; resulting in sustainable wildlife populations for those species that occupy or utilize the area. Maintenance and availability of existing waterings will continue to prove a dependable water source for wildlife, as well as livestock.

### 4. Threatened/Endangered Species:

Under the proposed action there would be no affect to Federal threatened and endangered species since there are no known T/E occurrences within this allotment.

#### Special Status Species

There will be no affect to the proposed mountain plover since there are no known populations and is on the extreme edge of its range. Potential habitat as described by literature may occur in isolated grassland areas, but the proposed action would not impact these areas from becoming utilized or inhibited.

Under the proposed action, there would be minimal impacts to the sand dune lizard due to the dispersal of livestock and the limited amount of shinnery oak/dune complexes. Areas where there is a concentration of livestock (waterings and fence comers) the habitat may be of lower quality, but these areas are small in nature. Range improvements (pipelines) may enhance lizard habitat by creating open dunal areas that are usually bordered by shinnery oak.

There would be no impact to the lesser prairie chicken. Even though there is a small amounts of shinnery oak/bluestem habitat located within this allotment, there has not been any documented sightings or use of the area by lesser prairie chickens. This area is outside of the historic range of the prairie chicken has depicted on maps.

### 5 Livestock Management:

Under the proposed action there would be no impacts to the current livestock management. The allotment would continue to be grazed in the same manner as it is currently.

### 6. Visual Resources:

The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

### 7. Air Quality:

The impacts to air quality would not change from the current situation. A minor amount of air quality degradation would continue.

### 8. Recreation:

Grazing would have little or no affect on the recreational opportunities. Recreation activities that could occur within this grazing allotment are somewhat limited or non existent due to land ownership patterns and the inadequate marking of public land boundaries.

#### **9. Significant Caves/Karst**

No known significant caves or karst features are known to exist on the public lands located within this allotment. Grazing would not affect the karst resources.

#### **B. Impacts of the No Livestock Grazing Alternative.**

The No Livestock Grazing Alternative has been previously analyzed at the National level in the Rangeland Reform '94 EIS and in the Roswell RMP/EIS. An in depth analysis of this alternative will not be made in this document. General impacts under this alternative would include no new rangeland improvement and the removal of existing rangeland improvements unless a determination was made that they were beneficial to other uses. Since no grazing authorizations on public lands would be permitted, livestock operators grazing lands adjoining Federal lands would be responsible for preventing the unauthorized use of these Federal lands. The BLM would not fence these lands. Rangeland administrative emphasis would shift to issuing crossing permits to or from nonfederal land inholdings and resolving unauthorized use.

#### **V. Cumulative Impacts**

Cumulative impacts of the grazing and no grazing alternatives were considered in Chapter 4 of Rangeland Reform '94 Draft Environmental Impact Statement and in Chapter 4 of the Roswell Resource Area Proposed RMP/EIS. The no livestock grazing alternative was not selected in either document. On the allotment specific level, there will be no cumulatively significant impacts from the proposed action /alternatives or from the no grazing alternative.

#### **VI. Residual Impacts**

The area has been grazed by livestock since the early part of the 1900's if not longer. Recent vegetative monitoring studies have shown that grazing, at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action

#### **VII. Mitigating Measures And/Or Permit/Lease Conditions**

Vegetation monitoring studies will be conducted in Fiscal Year 2001 and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

#### **VIII. Fundamentals of Rangeland Health**

The fundamentals of rangeland health are basic components of healthy rangelands and guiding principles for the development of standards and guidelines for livestock grazing. The fundamentals are identified in 43 CFR 4180.1 and pertain to watershed function, ecological processes, water quality and habitat for threatened and endangered species or other special status species. Based on the best available data and professional judgement, this EA addresses the fundamentals of Rangeland Health.

#### **Field Office Staff Involvement/Review**

John Spain - Rangeland Management Specialist  
Rand French - Wildlife Management Biologist  
Paul Happel - Outdoor Recreation Planner  
Jim.Schroeder - Watershed Specialist

Pat Flannary - Archeologist